Application Serial No.: 10/768,151 * Inventor(s): Otsuki et al.

Attorney Docket No.: 026035-00008

1. **AMENDMENT TO THE CLAIMS:**

Claim 1 (Currently Amended). A polymer electrolyte comprising at least one polymer selected from polyether, polyketone, polyetherketone, polysulfone, polyethersulfone, polyimide, polyetherimide, polybenzimidazole, polybenzothiazole, polybenzoxazole, polyphenylenesulfide, polyhydantoin, polyguinoxaline, polyquinoline, polyoxadiazole and polyparabanic acid;

said polymer comprising a repeating structural unit having one or both of an aromatic ring and a heterocyclic ring, and a repeating structural unit represented by the formula (1):

wherein X denotes a single bond, an electron-withdrawing group or an electron-donating group; R denotes a single bond[[,]] or -(CH₂)_q- or -(CF₂)_q- where q ranges from 1 to 10; m denotes an integer of [[0]] 1 to 10 and when m is from 1 to 10 Xs may be the same as or different from one another; k denotes an integer of 0 to 5; I denotes an integer of 0 to 4; and $k + l \ge 1$.

Claim 2 (Original). The polymer electrolyte according to claim 1, containing the sulfonic acid group in an amount of 0.3 to 5.0 meg/g.

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Claim 3 (Original). A proton conductive membrane comprising the polymer electrolyte as claimed in claim 1 or 2.

Claim 4 (Currently Amended). A membrane-electrode assembly in which an electrolyte membrane is sandwiched between a pair of electrodes, said electrolyte membrane comprising at least one polymer selected from polyether, polyketone, polyetherketone, polysulfone, polyethersulfone, polyimide, polyetherimide, polybenzimidazole, polybenzothiazole, polybenzoxazole, polyphenylenesulfide, polyhydantoin, polyquinoxaline, polyquinoline, polyoxadiazole and polyparabanic acid,

said polymer comprising a repeating structural unit having one or both of an aromatic ring and a heterocyclic ring, and a repeating structural unit represented by the formula (1):

wherein X denotes a single bond, an electron-withdrawing group or, an electron-donating group; R denotes a single bond[[,]] or $-(CH_2)_q$ or $-(CF_2)_q$ where q ranges from 1 to 10; m denotes an integer of [[0]] 1 to 10 and when m is from 1 to 10 Xs may be the same as or different from one another; k denotes an integer of 0 to 5; I denotes an integer of 0 to 4; and k + I \geq 1.

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Claim 5 (New). A polymer electrolyte according to claim 1, wherein the polymer electrolyte comprises at least one polymer selected from polyimide, polyetherimide, polybenzothiazole, polybenzoxazole, polyhydantoin, polyquinoxaline, polyquinoline, polyoxadiazole, and polyparabanic acid.